REMARKS

Reconsideration and withdrawal of the examiner's rejections under 35 USC § 103 is respectfully requested in view of the above amendments and the following remarks. The applicant would like to thank the examiner for her time and kind cooperation in this matter.

35 USC § 103

The examiner has rejected claims 1 and 4-10 under 35 U.S.C. 103(a) as being unpatentable over Nagasuna, et al. (US 6,297,319). Applicants respectfully traverse this rejection.

Nagasuna teaches a water absorbing agent made by treating a water-absorbent resin with an oxazoline compound of specified structure. The claimed polymer in the instant case must be made from (at least in part) amino-acrylate and/or alkacrylate monomers; and it must be azetidinium functionalised and further comprise secondary amine groups. Although the Examiner is correct in that Nagasuna at different parts discloses the acrylate material (col. 5, lines 35-40 for example) which can make up part of the water-resistant resin, and various azetidinium functionalised polyamine materials (col. 13, lines 39-43), these are not the specific 'acrylate' polymer as required by the claim. Importantly, Nagasuna does not teach a polymer made up from the defined acrylate monomers which is itself then azetidium functionalized as required by independent claim 1. Therefore, applicants respectfully submit that a proper prima facie case under § 103 has not been made out.

The azetidium functionalised materials on col. 13 of Nagasuna disclosed in the composition are in addition to the water-absorbent resin (see col. 13, lines 22-24) and act on the polymer as described below. Nagasuna teaches a water-resistant resin which may comprise 'acrylate' monomers, but it is then taught that in addition to this, a crosslinking agent such as an azetidinium compound may be used in a surface crosslinking-step to modify the water resistant resin to solve blocking property problems observed with prior art water absorbing agents (see Nagasuna col. 2, lines 37 to col. 3, line 2). The azetidinium compound will react with active sites on the polymer and will no longer exist as azetidinium.

Nagasuna further teaches it is necessary to strictly limit the amount of crosslinking agent for sanitary reasons (see Nagasuna, col. 2, lines 55-58). The skilled person would therefore understand that Nagasuna teaches the use of an azetidinium compound to undergo a crosslinking reaction with the resin surface thereby leaving no or minimal unreacted material. This does not teach or suggest to the skilled person to functionalise the 'acrylate' polymer with an azetidinium group in order to obtain the claimed azetidinium functionalized acrylate polymer. Thus it is not possible to follow the teachings of Nagasuna and arrive at a polymer as claimed in claim 1.

The examiner has rejected claim 11 under 35 U.S.C. 103(a) as being unpatentable over Nagasuna, et al., (US 6,297,319) as applied to the claims above and further in view of Evans (US 5,534,038). Applicants respectfully traverse this rejection.

Evans relates to the addition of 1,1,1,3,3,3- hexavluoroisopropyl methacrylate monomers (column 6, lines 35-36) to polymers for the benefit of producing added absorption of water in such products as disposable diapers (column 11, lines 20-25). Applicants respectfully submit that Evans fails to remedy the deficiencies of Nagasuna discussed above with respect to claim 11 which depends from claim 1.

CONCLUSION

In light of the above remarks, applicants submit that the claims now pending in the present application are in condition for allowance. Reconsideration and allowance of the application is respectfully requested. The examiner is invited to contact the undersigned if there are any questions concerning the case.

Respectfully submitted,

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